

### **ABSTRACT OF THE DISCLOSURE**

A programmable logic controller (PLC) with an auxiliary processing unit is disclosed. The conventional PLC with one central processing unit has the problems of low execution speed, low counting frequency, and low output clock. The auxiliary processing unit is  
5 used to assist the operation of the original central processing unit. Besides, when connecting with another PLC through an expansion interface module, the disclosed PLC also has better performance and efficiency than those of the conventional ones.